



ANNUAL REPORT

of the

Motor Fuel Quality Program

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Background

The Washington State Department of Agriculture (WSDA) is responsible for the state Motor Fuel Quality Program. Statutory authority for the program is provided in Chapter 19.112 RCW. The program, carried out by the department's Weights and Measures Program, inspects businesses marketing motor fuel at the retail level. The inspections are conducted across the state on a random basis. Inspections are accomplished on-site by using portable octane analyzers and by collecting samples for detailed laboratory analysis, including monitoring MTBE (methyl tertiary-butyl ether) levels. Adding MTBE as a fuel octane booster is prohibited in Washington.

The department uses three portable octane analyzers to do a screening test to determine if the motor fuel dispensed meets the octane number posted on dispensers. The department contracts with Saybolt, Inc., in Tukwila, to conduct detailed fuel analyses of: (1) samples taken when fuel fails the screening test; and (2) samples taken by agency inspectors according to a sampling plan. The laboratory analysis determines product compliance with motor fuel specifications of the American Society for Testing and Materials (ASTM). Weights and Measures inspectors also respond to and investigate consumer complaints involving fuel quality and quantity. Motor fuel registration with the department is required for all products marketed in the state.

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Funding for the Motor Fuel Quality Program is from the Motor Vehicle Account, appropriated in the state Transportation Budget. WSDA's appropriation for the 2005-2007 biennium is \$329,000. This funds two of the Weights and Measures Program's 12.3 FTEs, with \$85,000 allotted for contract laboratory analysis of fuel samples. Appropriations for this program have remained essentially unchanged since 1995.

Test Results

Table 1 provides a breakout of gasoline samples by grade with corresponding compliance rates for January through December 2005. The program took a total of 1,379 motor fuel samples in 2005. Of these samples, 1,236 were taken using the portable octane analyzers. If a sample failed this screening test, another sample was taken and submitted for laboratory analysis. Other samples were taken based on the program's sampling plan. In 2005, a total of 143 samples were submitted to the laboratory for octane, oxygenate and other detailed analysis. Only samples failing laboratory tests are reported as noncompliant. In 2005, regular, midgrade and premium product analysis resulted in zero, two and six samples, respectively, that failed to meet minimum octane or quality standards.

Table 1. Motor Fuel Analyses by Grade, 2005

Product	Total Samples Analyzed	Laboratory Analyses	Failed Standards	Compliance Rate*
Unleaded Regular	271	27	0	100%
Unleaded Midgrade	456	32	2	93.7%
Unleaded Premium	652	84	6	92.8%
Totals	1,379	143	8	94.4%

** Compliance rate based on laboratory analyses only.*

Program Notes

- This is the second year in a row the overall compliance rate fell below 95%. Overall compliance ranged from 98.6% to 99.2% between 2000 and 2003. This decline in compliance rate may be due, in part, to the reduced number of analyzed samples. Contract rates for laboratory testing have increased significantly over the years. As a result, WSDA has reduced the number of samples analyzed and the types of tests conducted. Between 1995 and 1999, the number of laboratory-analyzed samples averaged 1,320 per year. Between 2000 and 2003, the average dropped to 612 per year. In 2004 the number of laboratory-analyzed samples dropped to 230 and this year to 143. Overall compliance is still well above the 72% compliance rate when the program was implemented in 1991.
- Compliance rates for midgrade motor fuel declined from last year's rate of 96.4%. The compliance rates for premium fuel improved slightly from last year's rate of 91.6%. The program will continue to emphasize midgrade fuel in its sampling plan for 2006. In addition, the program will monitor for MTBE and for the requirement that a fuel's alcohol content, if any, be posted on the dispensers.

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- WSDA has been working with the Governor's task force on biodiesel and ethanol. The Weights and Measures Program has been a resource during the discussions on fuel standards. Legislation on fuel standards for biodiesel and ethanol will be considered by the Legislature during its 2006 session.

Complaints

The WSDA Weights and Measures Program received 315 motor fuel complaints in 2005, slightly up from the 312 complaints received last year. Complaint numbers for these two years are well above the number of complaints received the previous four years, which ranged from 176 in 2002 to 267 in 2000. The complaints are summarized in Table 2. Overall, 8.3 % of the complaints were found to be valid.

Table 2. Motor Fuel Complaints, 2005

Type of Complaint	Number of Complaints	Valid Complaints
Fuel Quality	20	2
Meter Accuracy	282	19
Price/Signage/Other	13	5
Totals	315	26

Conclusion

The Motor Fuel Quality Program provides regulatory oversight to the 3.2 billion gallons of taxable motor fuel sold to Washington motorists annually. The program acts as a deterrent for those who would attempt to sell low quality fuel to motorists in Washington. When the program was implemented in 1991 compliance rates were as low as 72%; the rates have consistently exceeded 94% since 1994. The program continues to be effective and well received by the citizens of Washington State and the retail motor fuel industry.